

## Technical Data Sheet

- 300% expansion
- Self healing
- Potable water safe
- Permanently active
- Easy to install
- Non Toxic
- Seals penetrations
- Suitable for irregular surfaces
- Many application
- Withstands up to 70m head of water.

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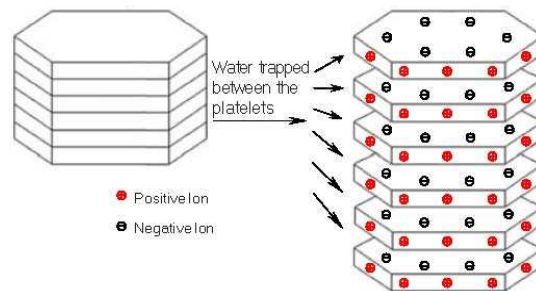
# Aquastop

## Hydrophilic Construction Joint Waterstop

### Description

**Aquastop Waterstop** is a flexible hydrophilic polymer rubber waterstop for sealing construction joints and precast panels. When installed **Aquastop** expands in a controlled fashion on contact with water.

**Aquastop** consists of tightly packed charged microscopic platelets. Between and within these platelets there is a separation of charges positive and negative. Water molecules are attracted to the unique clay structure of positive and negative charges and wedge themselves between the platelets causing them to separate & swell. The hydrated bentonite forms a seal preventing further migration of water. As hydrostatic pressure is increased the platelets compact forming a tighter seal.



### Features/Benefits

- Lightweight flexible coils easy to install.
- Eliminates seam welding & split forming associated with PVC/rubber waterbars.
- Butt end joining. Continuous waterstop
- Withstands hydrostatic head up to 70m
- Unaffected by repeated wetting & drying cycles.
- Permanently active system.
- Forms a positive seal, sealing cracks & small voids.
- May be used in potable water tanks. Non toxic
- Can be applied to irregular concrete surfaces.
- Compressible and malleable allowing for good contact in precast applications.
- Does not deteriorate.
- Self healing.

### Uses

#### Areas of Application Include :-

Underground structures, tunnels, underground stations, box culverts, pits, retaining walls, manholes, basements, precast panels etc.

**Aquastop** is used to stop water infiltration through both vertical and horizontal non-moving construction joints, irregular surfaces and around penetrations through concrete. **Aquastop** should not be used as an expansion joint sealant. It is designed to replace conventional waterstops in construction joints. The sodium bentonite in **Aquastop** is the key to its success. Bentonite swells when in contact with water to form an impermeable barrier. A permanent pressure seal is formed.

# Aquastop

## Surface Preparation

All surfaces must be structurally sound and free of dirt, dust, grease, paint, oil, form release, curing agents and other contaminants. Standing water should be removed prior to the application of **Aquastop**.

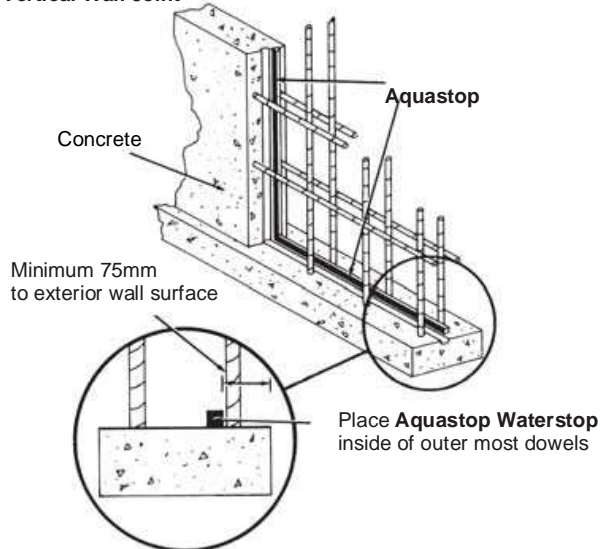
## General Installation Instructions

Apply by brush **Aquastop** adhesive along the concrete by the width of **Aquastop**. One litre of adhesive will cover approximately 30 metres. Whilst still tacky usually within 10-15 minutes apply the **Aquastop**. Remove the release paper and press the **Aquastop** firmly to the surface for several seconds. At the highest coil end on vertical sections pay particular attention. If the adhesive has dried out reapply to the surface. Mechanical fasteners may be used in conjunction with adhesive. Tightly butt join ends together to form a continuous waterstop. Do not pre-hydrate or submerge in water. If severe ground water chemicals or salts exist consult with Pasco. **Aquastop** is not self adhering.

## Detail Drawings

### Footing Joints

#### Vertical Wall Joint

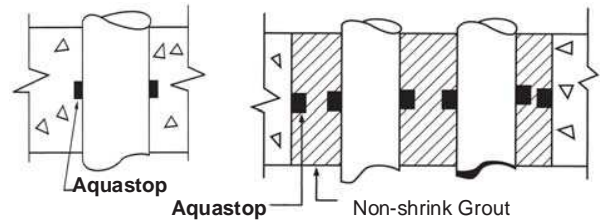


Typical placement of **Aquastop** at concrete construction joints.

**Penetrations:** follow the general installation procedures.

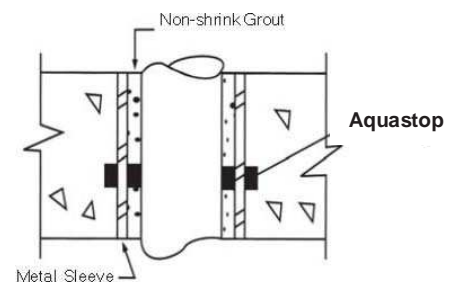
**Single Pipe:** Install around outer diameter of the pipe.

**Multi Pipe:** install around each pipe as well as around block out box construction.

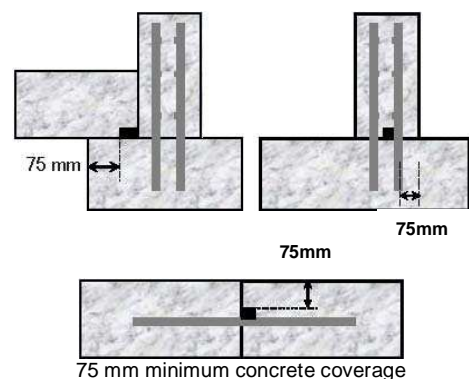


Single & Multiple pipe penetration

**Sleeved Pipe:** Install around the outer diameter of the sleeve. Install another strip between sleeve's inner diameter & the pipe if there is an excessive gap between inner diameter of the sleeve & the pipe two separate waterstops may require installing one on the inner diameter & the other on the pipe. The void should be filled with non shrink cementitious grout.

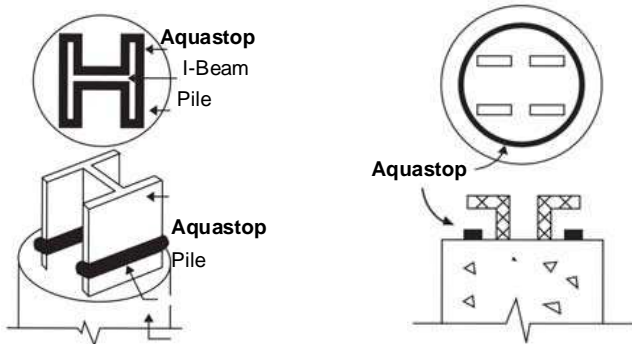


Placement of **Aquastop** at typical construction joints



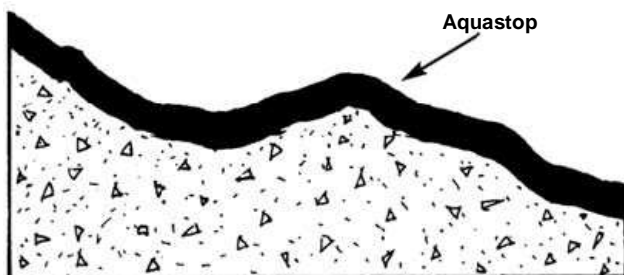
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**Pile Caps & Grade Beams:** Follow the general instructions above. Install to all construction joints around or adjacent to pile caps & grade beams. Install **Aquastop** around pile caps and grade beams above waterproofing. Wrap around all I-beams extending out of pile cap & encircle reinforcement out of pile cap.

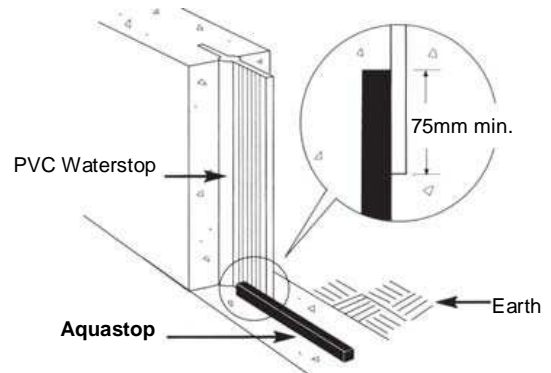


Encircling pile caps metal I-beam and reinforcement

**Irregular Concrete Surfaces:** Follow general instructions above. Press **Aquastop** against irregular contours filling cavities and cracks do not leave gaps between water bar and surface. It may prove necessary to install in an irregular direction to avoid major depressions or cracks.



**Joint to PVC Waterstop:** Follow general instructions above. Install **Aquastop** on the interior side of the PVC water bar place in direct contact and overlap the PVC water bar by at least 7.5 cm.



## Specification

The waterstop to be used in all construction joints shall be **Aquastop** or equal approved material. The waterstop shall consist of sodium bentonite in polymer rubber and expand by at least 300%. It shall be capable of being butt ended, shall not be overlapped nor create a packing effect in the concrete, it shall be pliable so that it follows the contours of the concrete and may be installed to all penetrations. The material will form a positive seal, form a continuous waterstop and withstand hydrostatic pressure up to 70m.

## Technical Specifications

Hydrostatic Head Resistance:	> 70 m.25 cycles
S.G.:	1.57; ASTM D71
Wet/Dry Cycling (25 cycles @70m):	No effect
Service Life:	-40°C to 80°C
Elongation:	>450%
Colour:	Black
Adhesion to Clean Dry Concrete:	Excellent
Penetration Cone:	4±5 ASTM D-217
Expansion:	100 - 300%

*\*Note : expansion is related to the quality of water, temperatures, age of material and storage conditions.*

# Aquastop

## Storage

12 months minimum, when stored in cool, dry conditions below 25°C.

## Packaging

### Aquastop Waterstop size:-

19 mm x 25 mm - 5 metre per roll

6 roll per carton



5 m. roll of **Aquastop**

## Health & Safety

There are no known hazards associated with **Aquastop** during normal use. Refer to product material safety data sheet.

## Limitations

Standard **Aquastop** should only be used in applications where ground water is not contaminated. In areas where saltwater or organic contaminated water is expected contact Pasco Construction Solutions for recommendations.

**Aquastop** should be used in areas fully confined in concrete by a minimum of 75 mm cover. To achieve success the installation instructions should be followed. Any hydrated material should be allowed to dry before placement of concrete.

*Pasco Construction Solutions Pty Ltd warrants its' products to be free of defects and faulty manufacture and are sold subject to its standard terms and conditions of sale, which are available upon request. All endeavors have been made to ensure the information provided in this technical data sheet is accurate and correct, however as the use of this material is beyond the supplier's control, liability is limited to replacement of material proven faulty. It is the responsibility of the purchaser to ensure that the product is suitable for the specific application and that it is applied in accordance with the suppliers recommendations.*